UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/060,017	01/28/2002	Nick Ernst	50004-00002	4969

25231   7590   06/14/2004

MARSH, FISCHMANN & BREYFOGLE LLP
3151 SOUTH VAUGHN WAY
SUITE 411
AURORA, CO   80014

EXAMINER
YANG, CLARA I

ART UNIT	PAPER NUMBER
2635	6

DATE MAILED: 06/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

<table>
<tr><td rowspan="2" colspan="2">Office Action Summary</td><td>Application No.</td><td>Applicant(s)</td></tr>
<tr><td>10/060,017</td><td>ERNST ET AL.</td></tr>
<tr><td colspan="2"></td><td>Examiner</td><td>Art Unit</td></tr>
<tr><td colspan="2"></td><td>Clara Yang</td><td>2635</td></tr>
</table>

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>28 January 2002</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-30</u> is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-30</u> is/are rejected.

7)☒ Claim(s) <u>24, 28 and 29</u> is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>23 April 2002</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Claim Objections

1.   Claim 29 is objected to under 37 CFR 1.75 as being a substantial duplicate of claim 22. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k). Though the preamble of claim 29 calls for a battery-powered control means, a preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

2.   Claims 24 and 28 are objected to because of the following informalities:

   ♦ Claim 24, line 24: Insert "and" after "property management system;".

   ♦ Claim 28, line 25: Insert ";" after "radio signal".

Appropriate correction is required.

Claim Rejections - 35 USC § 102

3.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4.   Claims 1, 2, 5, 7, 8, 22, and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,646,605 (Leonaggeo et al.).

Referring to claims 1, 22, and 29, Leonaggeo's method and apparatus for remote control of lock devices 105 that are installed in lockable items, such as file cabinets, credenzas, cabinets, and doors (see Col. 4, lines 64 – 67). Here it is understood that file cabinets or desk drawers are containers. Leonaggeo's system 100, as shown in Fig. 1, comprises: (a) telephone 101, computer 111, desktop input unit 113, and input terminal 115 or input means for inputting a command to lock (i.e., enable) or unlock (i.e., disable) a particular lock device 105 (see Col. 7, lines 46 – 52); (b) system controller 102 or control computer for receiving a lock/unlock command from an input means and assembling a digital message or instruction containing lock device 105's selective call receiver (SCR) address and a lock/unlock digital code corresponding to the lock/unlock instruction received in the command for each lock device 105 (see Col. 5, lines 49 – 67 and Col. 7, lines 32 – 38); (c) transmitter station 109, which includes transmitter/receiver 103 and is coupled to system controller 102, for conditioning the digital message for wireless transmission and transmitting the radio signal to lock devices 105 (see Col. 4, lines 9 – 11 and 22 – 32; and Col. 7, lines 40 – 45); and (d) each lock device 105, as shown in Figs. 5 and 6, comprising control portion 312 (i.e., control means) for receiving the transmitted radio signal and for locking or unlocking electromagnetic lock device 311 if the radio signal contains the SCR address specific to that lock device 105 (see Col. 7, lines 58 – 65; Col. 8, lines 59 – 67; and Col. 9, lines 1 – 12). Per Leonaggeo, lock device 105 has one or more batteries 330, which are coupled to power converter 301 via regulator/charger circuit 325 for recharging (see Col. 7, lines 62 – 65 and Col. 8, lines 1 – 16). Leonaggeo also teaches an alternative embodiment that is suitable for a small-area system, such as an office (see Figs. 20 and 21 and Col. 14, lines 55 – 63).

Regarding claim 2, as previously mentioned, Leonaggeo discloses that transmitter station 109 has a transmitter/receiver 103 for transmitting and receiving radio frequency (RF)

signals (see Col. 4, lines 22 – 30). In Col. 9, lines 1 – 4, Leonaggeo asserts that upon receiving an RF signal from transmitter station 109, lock device 105's receiver module 602 demodulates the signal; thus transmitter/receiver 103 must have a modulator for modulating the radio signal in accordance with the data to be transmitted.

Regarding claims 5 and 7, per Leonaggeo, lock device 105's control portion 312 has a receiver 310. Fig. 6 is an electrical block diagram of receiver 310 and shows that receiver 310 comprises: (a) intercepting device 601, which is an RF antenna, and a receiver module 602 for receiving the transmitted instruction (see Col. 8, lines 59 – 67 and Col. 9, lines 1 – 2); and (b) controller 603 or means for interpreting the signal as a command to lock or unlock the container (see Col. 9, lines 2 – 12). Controller 603 is connected to receiver module 602 and is understood to be a receiver controller. In Col. 9, lines 4 – 11, Leonaggeo teaches that controller 603 (1) determines if the received SCR address matches a predetermined address stored in address/code memory 604 and the lock/unlock code matches a predetermined code stored in address/code memory 604 and (2) generates a signal corresponding to the received lock/unlock code if the SCR address matches the stored address.

Regarding claim 8, Leonaggeo's lock device 105 comprises batteries 330 as explained above in claims 1, 22, and 29.

Claim Rejections - 35 USC § 103

5.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6.   This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7.   Claims 3, 4, and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,646,605 (Leonaggeo et al.) as applied to claims 2 and 5 above, and further in view of 47 Code of Federal Regulations (CFR) Chapter 1 (10-1-03 Edition).

        Regarding claims 3, 4, and 6, though Leonaggeo fails to specify that transmitter/receiver 103 of the first embodiment or output interface 2110 of the second embodiment transmit in the range of 450 – 470 MHz with an effective radiated power (ERP) of 5 – 30 watts (37.0 – 44.8 dBm), Leonaggeo does teach that SCR communication system 150 includes a mobile radio data terminal or a mobile radio (conventional or trunked) having a data terminal attached (see Col. 4, lines 37 – 49). According to §90.261(a) of 47 CFR Chapter 1, the Federal Communications Commission (FCC) has allocated frequencies in the 450 – 470 MHz band for land mobile operations and for fixed operations on a secondary basis to land mobile operations. The FCC stipulates that fixed stations located within 87 miles of an urbanized area having a population of at least 600,000 are limited to a transmitter output power of 20 watts (see §90.261(b)). Land mobile operations utilize mobile radio equipment such as Kenwood's TK-860 mobile radio, which is used in the applicant's preferred embodiment, and antennas such as Andrew Corporation's ASP 7A antenna, which is a quarterwave, omnidirectional antenna having unity

gain (0 dBd/2.1 dBi). Consequently, the resulting ERP of fixed operations in the 450 - 470 MHz

band is 20 watts, which is within the range of 5 - 30 watts, if the systems are within 87 miles of

an urbanized area having a population of at least 600,000.

Therefore, it would have been obvious to one having ordinary skill in the art at the time

the invention was made to modify the system of Leonaggeo such that it operates in the 450 -

470 MHz band because the 450 - 470 MHz band is less susceptible to propagation loss than

higher frequency bands (as indicated by the formula for calculating free space path loss,

wherein free space path loss in dB = 32.4 + 20*log (frequency in MHz) + 20*log (distance in

km)), thereby resulting in greater coverage and a more robust system.

8.   Claims 9 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S.

Patent No. 5,646,605 (Leonaggeo et al.) as applied to claims 8 and 29 above, and further in view

of U.S. Patent No. 6,097,933 (Bennett et al.).

Regarding claims 9 and 30, Leonaggeo's transmitter/receiver 103 is able to transmit an

enable or disable instruction to a particular lock device 105 but is unable to transmit the

instruction at a predetermined time. Leonaggeo also fails to teach that lock device 105's control

portion 312 is able to activate receiver 310 approximately at the predetermined time to receive

the instruction and to deactivate receiver 310 after the instruction has been received in order to

conserve battery life.

In an analogous art, Bennett teaches a paging system, as shown in Fig. 1, comprising: (a)

telephone 11 for inputting a message for a particular subscriber (see Col. 1, lines 22 - 25); (b) a

paging terminal 13 having a control computer for assembling the message, which contains an

address specific to the particular pager 15 (see Col. 1, lines 25 - 30); (c) paging stations 14_1 - 14_N

or transmitting means connected to paging terminal 13 for modulating the message and

transmitting the message wirelessly (see Col. 1, lines 27 – 30); and (d) pager 15 having a receiver 25 for receiving a message, a central processing unit (CPU) 21 for receiving the message if the message contains the address specific to that pager, and a battery 20 (see Col. 1, lines 35 – 37, 43 – 50, and 59 - 60). Bennett teaches dividing frames within a transmission cycle such that a frame includes a header synchronization (HS) segment, a system information (SI) segment, and page segments S_1 – S_Y, each segment S_i having an address block A and a data block B (see Col. 2, lines 35 – 43 and Col. 5, lines 39 – 51). In order to conserve pager 15's battery 20, the SI segment indicates times of transmission for a given protocol (see Col. 7, lines 13 – 19 and 44 – 47). Consequently, as shown in Fig. 10, when pager 15 receives the SI segment in step 103, pager 15 knows when to expect transmissions in its protocol and only turns on during the scheduled times at step 107 (see Col. 7, lines 48 – 62). As a further refinement, when paging terminal 13 transmits an address block, the address block includes information indicating when the corresponding data will be transmitted, thereby allowing pager 15 to wake up at the appropriate time to receive the corresponding data. Referring to Fig. 15, when pager 15 receives an address block containing an address at step 151 and determines if the received address matches its own address in steps 153 and 157. If the receives address matches its address, pager 15 enters a low power mode (i.e., deactivates) at step 159 until the corresponding data block is to be transmitted. Pager 15 wakes up at the appropriate time to receive the corresponding data, receives the data, and then enters the low power mode until the next scheduled segment is to be received at step 155 (see Col. 10, lines 21 – 30).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Leonaggeo's system as taught by Bennett because a remote controlled lock system 150 having (1) a transmitter/receiver 103 adapted to transmit a

lock/unlock instruction to a particular lock device 105 at a predetermined time and (2) lock

device 15's control portion 312 adapted to activate receiver 310 at the appropriate time to

receive the instruction and to deactivate receiver 310 after the instruction has been received

reduces power dissipation of lock device 15's batteries 330 (see Bennett, Col. 1, lines 59 – 60 and

Col. 2, lines 14 – 31).

9.   Claims 10, 11, 14, 17, 19, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable

over U.S. Patent No. 5,646,605 (Leonaggeo et al.) in view of U.S. Patent No. 6,275,166 (del

Castillo et al.).

Referring to claims 10 and 11, as explained above in claim 1 (see Section 3), Leonaggeo

teaches a remote controlled lock system comprising all the elements of claims 10 and 11 except

lock device 105 is installed in desks and other lockable items, such as file cabinets, credenzas,

cabinets, etc. (see Col. 4, lines 64 – 67). In other words, Leonaggeo fails to expressly disclose

installing lock device 105 in each of a hotel's in-room safes.

In an analogous art, del Castillo teaches an RF remote appliance control and monitoring

system 10 for building 11, which is a hotel or motel (see Col. 4, lines 59 – 61). System 10

comprises a headend control station (HCS) 14 in wireless communication with a plurality of

appliance management stations (AMS) 12, as shown in Fig. 1. Each AMS 12 controls a plurality

of appliances, including an in-room safe (see Col. 4, lines 59 – 61 and Col. 8, lines 19 - 25). As

shown in Fig. 1, HCS 14 includes: (a) satellite terminals 17 (e.g., operations, security, and front

office terminals) or means for inputting a control signal/instruction to a particular appliance

(see Col. 4, lines 11 – 15; and Col. 7, lines 56 - 65); (b) headend control computer (HCC) for

assembling a control signal comprising an identifier specific to a particular AMS 12 (see Fig. 4,

destination address 63 and device commands 67; and Col. 7, lines 40 – 47); and (c) headend

transceiver unit (HTU) 18 or transmitting means for modulating and wirelessly transmitting control signals (see Col. 4, lines 7 -11 and 26 - 32). Because del Castillo discloses that device commands 67 are directed to a particular appliance 24 (see Col. 7, lines 45 - 47), it is understood that destination address 63 and device commands 67 form an identifier specific to each appliance 24, including the safe. Del Castillo further teaches that AMS 12's universal relay unit (URU) 20 forwards the control signal to the specified appliance when AMS 12 receives a control signal from HCS 14 (see Col. 8, lines 14 - 18); consequently, AMS 12 is understood to be a safe control means for receiving the transmitted control signal.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Leonaggeo's system as taught by del Castillo because the ability to lock or unlock a safe from a remote location using an input terminal, such as telephone 101, eliminates the inconvenience when a guest forgets to lock the safe or when someone needs access to the safe while the user is away (see Leonaggeo, Col. 1, lines 31 - 37).

Regarding claims 14, 17, 19, and 20, Leonaggeo teaches all the limitations of these claims as explained above in claims 2, 5, 7, and 8.

10.   Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,646,605 (Leonaggeo et al.) in view of U.S. Patent No. 6,275,166 (del Castillo et al.) as applied to claim 20 above, and further in view of U.S. Patent No. 6,097,933 (Bennett et al.).

Leonaggeo omits teaching the limitations of claim 21.

As previously explained in claims 9 and 30, in an analogous art, Bennett teaches the limitations of claim 21.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Leonaggeo's system as taught by Bennett for the reasons disclosed above in claims 9 and 30 (see Bennett, Col. 1, lines 59 – 60 and Col. 2, lines 14 – 31).

11.   Claim 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,646,605 (Leonaggeo et al.) as applied to claim 22 above, and further in view of U.S. Patent No. 6,275,166 (del Castillo et al.).

Regarding claims 23 and 24, Leonaggeo's method for sending a command to a lock device 105 includes the steps of: (a) entering a request to lock or unlock a particular lock device 105 (see Col. 4, lines 9 – 15 and 57 – 63; and Col. 7, lines 46 – 52); and (b) interpreting the entered request as a command to lock or unlock the particular lock device 105 (see Col. 32 – 45). However, Leonaggeo fails to expressly disclose installing lock device 105 in each of a hotel's in-room safes.

In an analogous art, as explained above in claims 10 and 11, del Castillo teaches that each AMS 12 controls one or a plurality of appliances, including an in-room safe (see Col. 4, lines 59 – 61 and Col. 8, lines 19 - 25).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Leonaggeo's system as taught by del Castillo because the ability to lock or unlock a safe from a remote location using an input terminal, such as telephone 101, eliminates the inconvenience when a guest forgets to lock the safe or when someone needs access to the safe while the user is away (see Leonaggeo, Col. 1, lines 31 – 37).

12.   Claims 12, 13, 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,646,605 (Leonaggeo et al.) in view of U.S. Patent No. 6,275,166 (del Castillo et

al.) as applied to claims 11 and 23 above, and further in view of U.S. Patent No. 5,475,740 (Biggs, Jr. et al.).

Regarding claims 12 and 13, Leonaggeo's system, as modified by Del Castillo, includes system controller 102 for interpreting a telephone call made from telephone 101 to a predetermined telephone number as a command to enable or disable lock device 105 of a particular safe (see Leonaggeo, Fig. 1; Col. 4, lines 49 – 63; and Col. 7, lines 32 - 45). Though Leonaggeo and del Castillo also teach connecting a plurality of a input terminal devices (e.g., telephone 101, computer 111, etc.), Leonaggeo and del Castillo are silent on connecting a telephone in a hotel room to the hotel telephone system, connecting the hotel telephone system to a hotel property management system (PMS), connecting system controller 102 to the hotel telephone system, and connecting the hotel PMS to system controller 102.

In an analogous art, Biggs teaches a system for enabling user access to and payment for amenities, such as pay-per-view, in a hotel using a telephone (see Col. 2, lines 45 – 65). As shown in Fig. 1A, Biggs's control system comprises: (a) access phone 10 or input means to enable room unit 15 to receive a pay-per-view movie (see Col. 10, lines 6 – 16); (b) central distribution computer 50 or control computer for assembling an instruction to enable room unit 15, the instruction including an identifier specific to room unit 15 (see Col. 6, lines 51 – 53; Col. 10, lines 27 – 33 and 43 - 55; and Col. 11, lines 2 – 21); (c) RF modem 50B and combiner 55 or transmitting means for conditioning and transmitting the instruction to room unit 15 (see Col. 7, lines 13 – 27 and Col. 8, lines 58 – 66); and (d) each room unit 15 receiving the transmitted instruction if the instruction contains the identifier specific to that room unit (see Col. 11, lines 12 – 21). Still referring to Fig. 1A, Bigg's control system also comprises: (e) access phone 10 in a hotel room connected to the hotel's private branch exchange (PBX) 12, the room containing a

particular room unit 15 (see Col. 6, lines 17 – 20 and Col. 10, lines 6 – 16 and 40 – 42); (f) line 21

or first communications link connecting PBX 12 to property management system (PMS) 17 (see

Col. 6, lines 26 – 28); (g) line 19 or second communications link connecting central distribution

computer 50 to PBX 12 (see Col. 6, lines 24 – 26); (h) line 25 or third communications link

connecting PMS 17 to central distribution computer 50 (see Col. 11, lines 22 – 25); and (i) store

and forward switch 50A for interpreting a telephone call made from access phone 10 to a

predetermined telephone number as a command to enable room unit 15 (see Col. 10, lines 14 –

16 and 24 – 26; and Col. 11, lines 2 – 21).

Therefore, it would have been obvious to one having ordinary skill in the art at the time

the invention was made to modify Leonaggeo and del Castillo's system as taught by Biggs

because Biggs's system (1) enables a hotel guest to select goods and services, such as an in-room

safe, from his/her hotel room while billing the guest's credit card at the time of selection, (2)

facilitates the utilization of amenities, and (3) provides a guest access to the hotel PMS and the

option to pay the hotel bill using the telephone system's credit card reader (see Biggs, Col. 3,

lines 64 – 67; and Col. 4, lines 1 – 20).

Regarding claims 25 and 26, Leonaggeo's method, as modified by del Castillo, comprises

the steps of: (a) dialing a predetermined telephone number from telephone 101 (see Leonaggeo,

Col. 7, lines 46 – 52); and (b) interpreting the telephone call as a command to lock or unlock a

particular safe having locking device 105, wherein the safe is in a hotel room (see Leonaggeo,

Col. 7, lines 32 – 45 and del Castillo, Col. 4, lines 59 - 61). Leonaggeo and del Castillo's method,

though, lack the steps of dialing a predetermined telephone number from a telephone in a hotel

room containing the safe, receiving the room number of the hotel room containing the safe,

deriving the identifier of the safe from the received room number, and combining the identifier and command into the instruction.

Biggs's method for enabling user access to and payment for amenities includes the following steps: (a) a dialing a predetermined telephone number via an amenity button/speed dial button (see Col. 6, lines 10 - 13 and Col. 10, lines 14 - 16); (b) receiving and interpreting the telephone call as a command to enable a particular room unit 15 (see Col. 10, lines 40 - 55); (c) receiving access phone 10's identification number, which is understood to be the room number of the hotel room containing the particular room unit 15 (see Col. 7, lines 30 - 34); (d) deriving the identifier of the particular room unit 15 from the received room number (see Col. 8, lines 10 - 18 and Col. 10, lines 40 - 42); and (e) combining the identifier and the command in the instruction (see Col. 10, lines 43 - 55 and Col. 11, lines 12 - 21).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Leonaggeo and del Castillo's method as taught by Biggs because Biggs's method (1) enables a hotel guest to select goods and services, such as an in-room safe, from his/her hotel room while billing the guest's credit card at the time of selection, (2) facilitates the utilization of amenities, and (3) provides a guest access to the hotel PMS and the option to pay the hotel bill using the telephone system's credit card reader (see Biggs, Col. 3, lines 64 - 67; and Col. 4, lines 1 - 20).

13.   Claims 15, 16, 18, 27, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,646,605 (Leonaggeo et al.) in view of U.S. Patent No. 6,275,166 (del Castillo et al.) as applied to claims 14, 17, and 23 above, and further in view of 47 Code of Federal Regulations (CFR) Chapter 1 (10-1-03 Edition).

Regarding claims 15, 16, 18, and 27, though Leonaggeo fails to specify that transmitter/receiver 103 transmits in the range of 450 - 470 MHz with an effective radiated power (ERP) of 5 - 30 watts (37.0 - 44.8 dBm), Leonaggeo does teach that SCR communication system 150 includes a mobile radio data terminal or a mobile radio (conventional or trunked) having a data terminal attached (see Col. 4, lines 37 - 49). Because the FCC has allocated the 450 - 470 MHz band for fixed use on a secondary basis to land mobile operations, it is understood that transmitter/receiver 103 transmits in the range of 450 - 470 MHz and has an ERP of 20 watts as explained in claims 3 and 4.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Leonaggeo and del Castillo's system such that it operates in the 450 - 470 MHz band because the 450 - 470 MHz band is less susceptible to propagation loss than higher frequency bands, such as those used for paging systems, thereby resulting in greater coverage (as indicated by the above-mentioned formula for calculating free space path loss) and a more robust system.

Regarding claim 28, Leonaggeo discloses that lock device 105 (a) receives the transmitted control signal (see Col. 8, lines 65 - 67 and Col. 9, line 1); (b) demodulates the instruction from the control signal (see Col. 9, lines 1 - 2); (c) reads the command contained in the instruction (see Col. 9, lines 2 - 4), and (d) locks or unlocks the lock mechanism if its address is contained in the instruction (see Col. 9, lines 4 - 12).

Conclusion

14.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- ◆ Kenwood TK-760(G)(H)/860(G)(H) specifications: The specifications indicate that the equipment is type-accepted for land mobile operations under FCC part 90.

- ◆ Andrew Corporation ASP 7A specifications: The specifications indicate that Andrew Corporation's ASP 7A is an omni-directional quarter-wave antenna operating in the 108 – 512 MHz range and having unity gain.

- ◆ Breeze Wireless Communications, Ltd., *Radio Signal Propagation*: The paper teaches one of the formulas for calculating free space path loss.
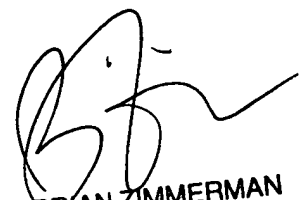
ॐ

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Clara Yang whose telephone number is (703) 305-4086. The examiner can normally be reached on 8:30 AM - 7:00 PM, Monday - Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Horabik can be reached on (703) 305-4704. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CY
3 June 2004

BRIAN ZIMMERMAN
PRIMARY EXAMINER